

AUTHOR INDEX TO VOLUME 57

- Abe, F., see Y. Karita 57 (1989) 455
- Adye, T., T. Berners-Lee, S. Brobeck, A. Camacho, D. Davids, F. Harris and P. Lorenz,
Online communications in the DELPHI experiment 57 (1989) 466
- Agogino, A., see D.E. Hall 57 (1989) 499
- Anderson, M.D., see D.R. Quarrie 57 (1989) 325
- Auguin, M., see A. Jejcic 57 (1989) 507
- Avery, P. and A. White, UFMULTI: a new parallel processing software system for HEP 57 (1989) 422
- Avico, N., P. Bacilieri, S. Cabasino, N. Cabibbo, L.A. Fernández, G. Fiorentini, A. Lai,
M.P. Lombardo, E. Marinari, F. Marzano, P. Paolucci, G. Parisi, J. Pech, F. Rapuano,
E. Remiddi, R. Sarno, G. Salina, A. Tarancón, G.M. Todesco, M. Torelli, R. Tripic-
cione and W. Tross, From APE to APE-100: from 1 to 100 Gflops in lattice gauge
theory simulations 57 (1989) 285
- Bacilieri, P., see N. Avico 57 (1989) 285
- Bacilieri, P., B. Caccia, R. Cardarelli, G.P. Carlucci, O. Ciaffoni, M. Coli, G. Di Pirro,
M.L. Ferrer, A. Ghiselli, A. Martini, G. Medici, G. Mirabelli, E. Pace, R. Santonico, L.
Trasatti, E. Valente and S. Valentini, STARNET, a fiber optic metropolitan area
network with centralized control 57 (1989) 459
- Banno, Y., see Y. Karita 57 (1989) 455
- Barao, F., C. Gaspar, Ph. Gavillet, J.Ph. Laugier, B. Martin, P. Moreau, M. Pimenta, M.
Reis and J. Varela, DELPHI's central partition 57 (1989) 358
- Berners-Lee, T., see T. Adye 57 (1989) 466
- Berny, L. and H. Frese, Automatic generation of software detailed design documents for
C language programs 57 (1989) 476
- Bhadra, S., see ZEUS CDAQ Collaboration 57 (1989) 321
- Billoir, P., Progressive track recognition with a Kalman-like fitting procedure 57 (1989) 390
- Bizeau, C., A. Bogaerts, R.W. Dobinson, D.R.N. Jeffery, W. Lu, C. Parkman and Y.
Perrin, The use and possible abuse of transputer links 57 (1989) 301
- Blair-Fish, J., see S.P. Booth 57 (1989) 101
- Blobel, V., From DST to publication 57 (1989) 148
- Bock, R.K., Bringing together high energy physicist and computer scientist. A summary
of the Oxford conference on Computing in High Energy Physics 57 (1989) 1
- Boeri, F., see A. Jejcic 57 (1989) 507
- Bogaerts, A., see C. Bizeau 57 (1989) 301
- Boissat, C., see D.M. Sendall 57 (1989) 343
- Boissat, C., R. Jones and G. Mornacchi, The model human interface 57 (1989) 512
- Bonissent, A. and F. Etienne, Artificial intelligence steering for the interactive analysis of
a high energy physics experiment 57 (1989) 447
- Booth, A.W., J.T. Carroll, R. Forster, G. Goeransson, L. Gustafsson and N. Ho, A
knowledge-based approach to network and module diagnosis 57 (1989) 332
- Booth, S.P., K.C. Bowler, D.J. Candlin, R.D. Kenway, B.J. Pendleton, A.M. Thornton,

AUTHOR INDEX TO VOLUME 57

- Abe, F., see Y. Karita 57 (1989) 455
- Adye, T., T. Berners-Lee, S. Brobeck, A. Camacho, D. Davids, F. Harris and P. Lorenz,
Online communications in the DELPHI experiment 57 (1989) 466
- Agogino, A., see D.E. Hall 57 (1989) 499
- Anderson, M.D., see D.R. Quarrie 57 (1989) 325
- Auguin, M., see A. Jejcic 57 (1989) 507
- Avery, P. and A. White, UFMULTI: a new parallel processing software system for HEP 57 (1989) 422
- Avico, N., P. Bacilieri, S. Cabasino, N. Cabibbo, L.A. Fernández, G. Fiorentini, A. Lai,
M.P. Lombardo, E. Marinari, F. Marzano, P. Paolucci, G. Parisi, J. Pech, F. Rapuano,
E. Remiddi, R. Sarno, G. Salina, A. Tarancón, G.M. Todesco, M. Torelli, R. Tripic-
cione and W. Tross, From APE to APE-100: from 1 to 100 Gflops in lattice gauge
theory simulations 57 (1989) 285
- Bacilieri, P., see N. Avico 57 (1989) 285
- Bacilieri, P., B. Caccia, R. Cardarelli, G.P. Carlucci, O. Ciaffoni, M. Coli, G. Di Pirro,
M.L. Ferrer, A. Ghiselli, A. Martini, G. Medici, G. Mirabelli, E. Pace, R. Santonico, L.
Trasatti, E. Valente and S. Valentini, STARNET, a fiber optic metropolitan area
network with centralized control 57 (1989) 459
- Banno, Y., see Y. Karita 57 (1989) 455
- Barao, F., C. Gaspar, Ph. Gavillet, J.Ph. Laugier, B. Martin, P. Moreau, M. Pimenta, M.
Reis and J. Varela, DELPHI's central partition 57 (1989) 358
- Berners-Lee, T., see T. Adye 57 (1989) 466
- Berny, L. and H. Frese, Automatic generation of software detailed design documents for
C language programs 57 (1989) 476
- Bhadra, S., see ZEUS CDAQ Collaboration 57 (1989) 321
- Billoir, P., Progressive track recognition with a Kalman-like fitting procedure 57 (1989) 390
- Bizeau, C., A. Bogaerts, R.W. Dobinson, D.R.N. Jeffery, W. Lu, C. Parkman and Y.
Perrin, The use and possible abuse of transputer links 57 (1989) 301
- Blair-Fish, J., see S.P. Booth 57 (1989) 101
- Blobel, V., From DST to publication 57 (1989) 148
- Bock, R.K., Bringing together high energy physicist and computer scientist. A summary
of the Oxford conference on Computing in High Energy Physics 57 (1989) 1
- Boeri, F., see A. Jejcic 57 (1989) 507
- Bogaerts, A., see C. Bizeau 57 (1989) 301
- Boissat, C., see D.M. Sendall 57 (1989) 343
- Boissat, C., R. Jones and G. Mornacchi, The model human interface 57 (1989) 512
- Bonissent, A. and F. Etienne, Artificial intelligence steering for the interactive analysis of
a high energy physics experiment 57 (1989) 447
- Booth, A.W., J.T. Carroll, R. Forster, G. Goeransson, L. Gustafsson and N. Ho, A
knowledge-based approach to network and module diagnosis 57 (1989) 332
- Booth, S.P., K.C. Bowler, D.J. Candlin, R.D. Kenway, B.J. Pendleton, A.M. Thornton,

- D.J. Wallace, J. Blair-Fish and D. Roweth, Large scale applications of transputers in HEP: the Edinburgh Concurrent Supercomputer Project 57 (1989) 101
- Booth, S.P., R.W. Dobinson, D.R.N. Jeffery, W. Lu, K.M. Storr and A. Thornton, An evaluation of the Meiko computing surface for HEP Fortran farming 57 (1989) 486
- Bowler, K.C., see S.P. Booth 57 (1989) 101
- Bozzoli, W., see D.M. Sendall 57 (1989) 343
- Briggs, D., T. Glanzman, P. Grosse-Wiesmann, J. Tinsman, S. Holmgren and M.W. Schaad, A calorimeter software trigger for the Mark II detector at SLC 57 (1989) 273
- Brobeck, S., see T. Adye 57 (1989) 466
- Brun, M., R. Brun and A.A. Rademakers, CMZ - a source code management system 57 (1989) 235
- Brun, R., see M. Brun 57 (1989) 235
- Brun, R., see M.J. Corden 57 (1989) 268
- Brun, R., O. Couet, C.E. Vandoni and P. Zanmarini, PAW, a general-purpose portable software tool for data analysis and presentation 57 (1989) 432
- Bruyant, F., see M.J. Corden 57 (1989) 268
- Burkimsher, P., see D.M. Sendall 57 (1989) 343
- Cabasino, S., see N. Avico 57 (1989) 285
- Cabibbo, N., see N. Avico 57 (1989) 285
- Caccia, B., see P. Bacilieri 57 (1989) 459
- Camacho, A., see T. Adye 57 (1989) 466
- Candlin, D.J., see S.P. Booth 57 (1989) 101
- Cardarelli, R., see P. Bacilieri 57 (1989) 459
- Carlucci, G.P., see P. Bacilieri 57 (1989) 459
- Carroll, J.T., see A.W. Booth 57 (1989) 332
- Carter, J.M., M.G. Green and T. Medcalf, Transparent use of transputers for off-line computation 57 (1989) 495
- Chan, C.S., see A.C. Saulys 57 (1989) 353
- Chandra, U., G. Riccardi, J. Vagi, J.-L. Dekeyser and F. Hannedouche, Aftan: array Fortran programming language 57 (1989) 263
- Chen, H.-S., Fast simulation of showers in inhomogeneous media 57 (1989) 375
- Ciaffoni, O., see P. Bacilieri 57 (1989) 459
- Cittolin, S., M. Demoulin, A. Fucci, W. Haynes, B. Martin, J.P. Porte and P. Sphicas, The third level trigger and output event unit of the UA1 data-acquisition system 57 (1989) 370
- Coli, M., see P. Bacilieri 57 (1989) 459
- Corden, M.J., C.H. Georgiopoulos and M.E. Mermikides, Implementation of the ALEPH detector simulation code using UNIX with on-line graphics display 57 (1989) 260
- Corden, M.J., C.H. Georgiopoulos, R. Brun, F. Bruyant and J.-L. Dekeyser, Progress towards a vectorized version of the GEANT Monte Carlo program 57 (1989) 268
- Couet, O., see R. Brun 57 (1989) 432
- Crombie, M., see ZEUS CDAQ Collaboration 57 (1989) 321
- Cutts, D., J.S. Hoftun, C.R. Johnson and R.T. Zeller, Data acquisition at D0 57 (1989) 339
- Cutts, D., J.S. Hoftun, A. Sornborger, C.R. Johnson and R.T. Zeller, Neural networks for event filtering at D0 57 (1989) 478
- Da Rocha, A.R.C. and S. Palermo, Software quality assurance in HEP 57 (1989) 524
- Davidenko, A.M., see V.P. Voevodin 57 (1989) 532
- Davids, D., see T. Adye 57 (1989) 466

- Day, C.T., see D.R. Quarrie 57 (1989) 325
- Dekeyser, J.-L., see U. Chandra 57 (1989) 263
- Dekeyser, J.-L., see M.J. Corden 57 (1989) 268
- Delfino, M., E. Fernández, S. Orteu and A. Pacheco, The ALEPH event reconstruction facility: parallel processing using workstations 57 (1989) 401
- Demoulin, M., see S. Cittolin 57 (1989) 370
- Denby, B. and S.L. Linn, Status of HEP neural net research in the USA 57 (1989) 297
- Di Pirro, G., see P. Bacilieri 57 (1989) 459
- Dittus, F., Parallel processing with attached processors in a computer center environment 57 (1989) 395
- Dobberstein, M.P., The calibration of the ZEUS forward drift chamber: an application for software with a high degree of parallelism 57 (1989) 483
- Dobinson, R.W., see C. Bizeau 57 (1989) 301
- Dobinson, R.W., see S.P. Booth 57 (1989) 486
- Ekimov, An.V., see V.P. Voevodin 57 (1989) 532
- Erhard, P., see ZEUS CDAQ Collaboration 57 (1989) 313
- Etienne, F., see A. Bonissent 57 (1989) 447
- Etkin, A., see A.C. Saulys 57 (1989) 353
- Fernández, E., see M. Delfino 57 (1989) 401
- Fernández, L.A., see N. Avico 57 (1989) 285
- Ferrer, M.L., see P. Bacilieri 57 (1989) 459
- Ficenec, J., see ZEUS CDAQ Collaboration 57 (1989) 313
- Fiorentini, G., see N. Avico 57 (1989) 285
- Fisher, S.M. and P. Palazzi, Using a data model from software design to data analysis: what have we learned 57 (1989) 169
- Flieller, S., T.Node, industrial version of SuperNode 57 (1989) 492
- Fluckiger, F., Overview of HEP wide area networking: producer perspective 57 (1989) 183
- Foley, K.J., see A.C. Saulys 57 (1989) 353
- Forster, R., see A.W. Booth 57 (1989) 332
- Frese, H., see L. Berny 57 (1989) 476
- Fucci, A., see S. Cittolin 57 (1989) 370
- Gamble, J.N., Beyond Ethernet – future LAN's 57 (1989) 129
- Gaspar, C., see F. Barao 57 (1989) 358
- Gather, K., see ZEUS CDAQ Collaboration 57 (1989) 313
- Gather, K.S., SASD-tools for program design 57 (1989) 29
- Gavillet, Ph., see F. Barao 57 (1989) 358
- Georgiopoulos, C.H., see M.J. Corden 57 (1989) 268
- Georgiopoulos, C.H. and M.E. Mermikides, Vectorized simulation of the response of a time projection chamber 57 (1989) 255
- Georgiopoulos, C.H., see M.J. Corden 57 (1989) 260
- Ghiselli, A., see P. Bacilieri 57 (1989) 459
- Glanzman, T., see D. Briggs 57 (1989) 273
- Goeransson, G., see D.R. Quarrie 57 (1989) 325
- Goeransson, G., see A.W. Booth 57 (1989) 332
- Goto, H., see Y. Karita 57 (1989) 455
- Govorun, V.N., see V.P. Voevodin 57 (1989) 532

- Green, M.G., see J.M. Carter 57 (1989) 495
- Greiman, W.H., see D.E. Hall 57 (1989) 211
- Greiman, W.H., see D.E. Hall 57 (1989) 499
- Grosse-Wiesmann, P., see D. Briggs 57 (1989) 273
- Gustafsson, L., see A.W. Booth 57 (1989) 332
- Hackenburg, R.W., see A.C. Saulys 57 (1989) 353
- Hall, D.E., W.H. Greiman, W.F. Johnston, A.X. Merola, S.C. Loken and D.W. Robertson, The software bus: a vision for scientific software development 57 (1989) 211
- Hall, D.E., A. Agogino, W.H. Greiman, W.F. Johnston, D. Olson, R. Paasch, A. Padgaonkar and D.W. Robertson, A fault location system for a time of flight detector array 57 (1989) 499
- Hallam-Baker, P.M. and I.C. McArthur, Use of Occam in ZEUS 57 (1989) 520
- Hannedouche, F., see U. Chandra 57 (1989) 263
- Harris, F., see T. Adye 57 (1989) 466
- Haynes, W., see S. Cittolin 57 (1989) 370
- Heath, G., see ZEUS CDAQ Collaboration 57 (1989) 313
- Hertzberger, L.O., Does HEP still hold challenges for computer science? 57 (1989) 15
- Hirose, H., see Y. Karita 57 (1989) 455
- Ho, N., see A.W. Booth 57 (1989) 332
- Hoare, C.A.R., Formal methods in computer system design 57 (1989) 206
- Hoek, J., Use of attached transputer hardware to VAX's for offline analysis 57 (1989) 503
- Hoftun, J.S., see D. Cutts 57 (1989) 339
- Hoftun, J.S., see D. Cutts 57 (1989) 478
- Holmgren, S., see D. Briggs 57 (1989) 273
- Hunt, L., see A.M. Rushton 57 (1989) 427
- Hutton, J., Future scientific networking 57 (1989) 188
- Iacovacci, M., see ZEUS CDAQ Collaboration 57 (1989) 313
- Ilyin, V.A., A.P. Kryukov, A.Ya. Rodioniov and A.Yu. Taranov, High speed Dirac algebra calculations in a space of arbitrary dimension by means of a computer algebra system 57 (1989) 505
- Ivanova, N.S., see V.P. Voevodin 57 (1989) 532
- Jeffery, D.R.N., see C. Bizeau 57 (1989) 301
- Jeffery, D.R.N., see S.P. Booth 57 (1989) 486
- Jejcic, A., J. Maillard, J. Silva, M. Auguin and F. Boeri, Could running experience on SPMD computers contribute to the architectural choices for future dedicated computers for high energy physics simulation? 57 (1989) 507
- Johnson, C.R., see D. Cutts 57 (1989) 339
- Johnson, C.R., see D. Cutts 57 (1989) 478
- Johnstad, H., PAW at Fermilab 57 (1989) 438
- Johnston, W.F., see D.E. Hall 57 (1989) 211
- Johnston, W.F., see D.E. Hall 57 (1989) 499
- Jones, R., see D.M. Sendall 57 (1989) 343
- Jones, R., see C. Boissat 57 (1989) 512

- Karita, Y., F. Abe, H. Hirose, H. Goto, R. Ogasawara, F. Yuasa, Y. Banno and Y. Yasu, Networking for high energy physics in Japan 57 (1989) 455
- Kehres, J., see ZEUS CDAQ Collaboration 57 (1989) 313
- Kennedy, A.D., Status of lattice gauge theory calculations 57 (1989) 57
- Kenway, R.D., see S.P. Booth 57 (1989) 101
- Kirkby, D., see ZEUS CDAQ Collaboration 57 (1989) 321
- Kovaltsov, V.I., see V.P. Voevodin 57 (1989) 532
- Kowalski, H., T. Poser, L. Stanco and E. Tscheslog, Investigation of ADAMO performance in the ZEUS calorimeter reconstruction program 57 (1989) 222
- Kozyaev, Yu.M., see V.P. Voevodin 57 (1989) 532
- Kramer, M.A., see A.C. Saulys 57 (1989) 353
- Kreymmer, A., see P. Lebrun 57 (1989) 231
- Krischer, W., Commercial highly parallel signal processors on-line? 57 (1989) 121
- Kryukov, A.P., see V.A. Ilyin 57 (1989) 505
- Kunz, P.F., Software management issues 57 (1989) 191
- Lai, A., see N. Avico 57 (1989) 285
- Laugier, J.Ph., see F. Barao 57 (1989) 358
- Lebrun, P. and A. Kreymmer, High level language memory management on parallel architectures 57 (1989) 231
- Lessner, E.S., Weighted fit of parametric functions to distributions. The new interface of HBOOK with MINUIT 57 (1989) 385
- Levine, R.H., You want me to predict the future? 57 (1989) 118
- Lindenbaum, S.J., see A.C. Saulys 57 (1989) 353
- Linn, S.L., see B. Denby 57 (1989) 297
- Loken, S.C., see D.E. Hall 57 (1989) 211
- Lombardo, M.P., see N. Avico 57 (1989) 285
- Longacre, R.S., see A.C. Saulys 57 (1989) 353
- Lorenz, P., see T. Adye 57 (1989) 466
- Love, W.A., see A.C. Saulys 57 (1989) 353
- Loveless, R., see ZEUS CDAQ Collaboration 57 (1989) 313
- Lu, W., see C. Bizeau 57 (1989) 301
- Lu, W., see S.P. Booth 57 (1989) 486
- Lukyantsev, A.F., see V.P. Voevodin 57 (1989) 532
- Mackenzie, P.B., Machines for lattice gauge theory 57 (1989) 37
- Maillard, J., see A. Jejcic 57 (1989) 507
- Männer, R., A programmable systolic array correlator as a trigger processor for electron pairs in RICH (ring image Cherenkov) counters 57 (1989) 516
- Marinari, E., see N. Avico 57 (1989) 285
- Martin, B., see F. Barao 57 (1989) 358
- Martin, B., see S. Cittolin 57 (1989) 370
- Martin, W., see S. Youssef 57 (1989) 251
- Martin, W.R., Successful vectorization - reactor physics Monte Carlo code 57 (1989) 68
- Martini, A., see P. Bacilieri 57 (1989) 459
- Marzano, F., see N. Avico 57 (1989) 285
- Matheys, J-P., see D.M. Sendall 57 (1989) 343
- Matveev, M.Yu., see V.P. Voevodin 57 (1989) 532

- May, E.N., Portable parallel programming in a Fortran environment 57 (1989) 278
- Mazza, C., Software project management 57 (1989) 23
- McArthur, I.C., see P.M. Hallam-Baker 57 (1989) 520
- McColl, W.F., Parallel algorithms and architectures 57 (1989) 84
- McGlynn, T., see A.M. Rushton 57 (1989) 427
- Medcalf, T., see J.M. Carter 57 (1989) 495
- Medici, G., see P. Bacilieri 57 (1989) 459
- Mermikides, M.E., see C.H. Georopoulos 57 (1989) 255
- Mermikides, M.E., see M.J. Corden 57 (1989) 260
- Merola, A.X., see D.E. Hall 57 (1989) 211
- Metcalf, M., Recent progress in Fortran standardization 57 (1989) 78
- Mirabelli, G., see P. Bacilieri 57 (1989) 459
- Mobayyen, M., see ZEUS CDAQ Collaboration 57 (1989) 313
- Moreau, P., see F. Barao 57 (1989) 358
- Mornacchi, G., see D.M. Sendall 57 (1989) 343
- Mornacchi, G., see C. Boissat 57 (1989) 512
- Morris, T.W., see A.C. Saulys 57 (1989) 353
- Mount, R.P., Overview of the essential tools 57 (1989) 140
- Mueller, K. and P. Pfeifer, CODEBASE: a commercially developed code management system and code transfer facility 57 (1989) 239
- Myers, D.R., HEP graphics: standard and portability versus performance and cost 57 (1989) 176
- NA-35 Collaboration, G. Vesztergombi, "Iconic" tracking algorithms for high energy physics using the TRAX-I massively parallel processor 57 (1989) 290
- Nash, T., Event parallelism: distributed memory parallel computing for high energy physics experiments 57 (1989) 47
- Nguyen, T., see D.M. Sendall 57 (1989) 343
- Nichols, J., The Fermilab central computing facility architectural model 57 (1989) 417
- Notz, D., see ZEUS CDAQ Collaboration 57 (1989) 313
- Ochsenbein, F., see A.M. Rushton 57 (1989) 427
- Ogasawara, R., see Y. Karita 57 (1989) 455
- Olson, D., see D.E. Hall 57 (1989) 499
- O'Neale, S.W., The OPAL event server 57 (1989) 413
- Orr, R., see ZEUS CDAQ Collaboration 57 (1989) 313
- Orr, R.S., see ZEUS CDAQ Collaboration 57 (1989) 321
- Orteu, S., see M. Delfino 57 (1989) 401
- Otto, S.W., Shared-memory versus distributed-memory: halftime score 57 (1989) 95
- Paasch, R., see D.E. Hall 57 (1989) 499
- Pace, E., see P. Bacilieri 57 (1989) 459
- Pacheco, A., see M. Delfino 57 (1989) 401
- Padgaonkar, A., see D.E. Hall 57 (1989) 499
- Palazzi, P., see S.M. Fisher 57 (1989) 169
- Palermo, S., see A.R.C. da Rocha 57 (1989) 524
- Paolucci, P., see N. Avico 57 (1989) 285
- Parisi, G., see N. Avico 57 (1989) 285
- Parkman, C., see C. Bizeau 57 (1989) 301

- Patrick, J., see D.R. Quarrie 57 (1989) 325
- Pech, J., see N. Avico 57 (1989) 285
- Pendleton, B.J., see S.P. Booth 57 (1989) 101
- Perrin, Y., see C. Bizeau 57 (1989) 301
- Perrine, B., see A.M. Rushton 57 (1989) 427
- Pfeifer, P., see K. Mueller 57 (1989) 239
- Pimenta, M., see F. Barao 57 (1989) 358
- Pimenta, M., see C.M.L. Werner 57 (1989) 364
- Platner, E.D., see A.C. Saulys 57 (1989) 353
- Porte, J.P., see S. Cittolin 57 (1989) 370
- Poser, T., see H. Kowalski 57 (1989) 222
- Putzer, A., Data structures and data-base systems used in high energy physics: modelling and implementation 57 (1989) 156
- Quarrie, D.R., M.D. Anderson, C.T. Day, G. Goeransson, J. Patrick, M. Schmitz, E. Sexton and B. Troemel, The CDF online system 57 (1989) 325
- Rademakers, A.A., see M. Brun 57 (1989) 235
- Rapuano, F., see N. Avico 57 (1989) 285
- Read, B.J., Data structures and organisation: special problems in scientific applications 57 (1989) 164
- Reis, M., see F. Barao 57 (1989) 358
- Remiddi, E., see N. Avico 57 (1989) 285
- Riccardi, G., see U. Chandra 57 (1989) 263
- Richmond, A., see A.M. Rushton 57 (1989) 427
- Robertson, D.W., see D.E. Hall 57 (1989) 211
- Robertson, D.W., see D.E. Hall 57 (1989) 499
- Rodioniov, A.Ya., see V.A. Ilyin 57 (1989) 505
- Romelfanger, F., see A.M. Rushton 57 (1989) 427
- Roweth, D., see S.P. Booth 57 (1989) 101
- Runge, K., A high speed network for HEP in Germany 57 (1989) 452
- Rushton, A.M., L. Hunt, T. McGlynn, F. Ochsenbein, B. Perrine, A. Richmond, F. Romelfanger, G. Russo, P.M.B. Shames, J. Travisano, L. Willard and S. Zeller, Design and implementation of an optical disk-based astronomical data archive 57 (1989) 427
- Russo, G., see A.M. Rushton 57 (1989) 427
- Salina, G., see N. Avico 57 (1989) 285
- Santonico, R., see P. Bacilieri 57 (1989) 459
- Sarno, R., see N. Avico 57 (1989) 285
- Saulys, A.C., A. Etkin, K.J. Foley, R.W. Hackenburg, R.S. Longacre, W.A. Love, T.W. Morris, E.D. Platner, S.J. Lindenbaum, C.S. Chan and M.A. Kramer, MPS data-acquisition software system 57 (1989) 353
- Schaad, M.W., see D. Briggs 57 (1989) 273
- Schaile, O., DZDISP: a graphics tool to interact with ZEBRA data structures 57 (1989) 528
- Schilling, P.K., Graphics at DESY 57 (1989) 443
- Schmitz, M., see D.R. Quarrie 57 (1989) 325
- Sendall, D.M., C. Boissat, W. Bozzoli, P. Burkimsher, R. Jones, J-P. Matheys, G. Mornacchi, T. Nguyen, P. Vande Vyvre, A. Vascotto and D. Weaver, MODEL: a software suite for data acquisition 57 (1989) 343

- Senko, V.A., see V.P. Voevodin 57 (1989) 532
- Sephton, A., see ZEUS CDAQ Collaboration 57 (1989) 313
- Sexton, E., see D.R. Quarrie 57 (1989) 325
- Shames, P.M.B., see A.M. Rushton 57 (1989) 427
- Silva, J., see A. Jejcic 57 (1989) 507
- Skotniczny, Z., Query by Forms: user-oriented relational database retrieving system and its application in analysis of experiment data 57 (1989) 225
- Sliwa, K., CDF's experience with a parallel architecture multiprocessor system - ACP 57 (1989) 407
- Sornborger, A., see D. Cutts 57 (1989) 478
- Souza, J., see C.M.L. Werner 57 (1989) 364
- Sphicas, P., see S. Cittolin 57 (1989) 370
- Stanco, L., see H. Kowalski 57 (1989) 222
- Stanco, L., Particle track reconstruction in heavy materials with the Kalman technique 57 (1989) 380
- Storr, K.M., see S.P. Booth 57 (1989) 486
- Story, C.M., Software engineering in industry 57 (1989) 217
- Stroili, R., see ZEUS CDAQ Collaboration 57 (1989) 313
- Sufrin, B., Formal methods in system design and implementation 57 (1989) 108
- Sytin, A.N., see V.P. Voevodin 57 (1989) 532
-
- Tarancón, A., see N. Avico 57 (1989) 285
- Taranov, A.Yu., see V.A. Ilyin 57 (1989) 505
- Thaler, J.J., Data-acquisition modeling and simulation 57 (1989) 309
- Thornton, A., see S.P. Booth 57 (1989) 486
- Thornton, A.M., see S.P. Booth 57 (1989) 101
- Tinsman, J., see D. Briggs 57 (1989) 273
- Tishin, G.V., see V.P. Voevodin 57 (1989) 532
- Todesco, G.M., see N. Avico 57 (1989) 285
- Tokushuku, K., see ZEUS CDAQ Collaboration 57 (1989) 313
- Torelli, M., see N. Avico 57 (1989) 285
- Trasatti, L., see P. Bacilieri 57 (1989) 459
- Travisano, J., see A.M. Rushton 57 (1989) 427
- Treleaven, P. and M. Vellasco, Neural computing overview 57 (1989) 543
- Tripiccione, R., see N. Avico 57 (1989) 285
- Troemel, B., see D.R. Quarrie 57 (1989) 325
- Tross, W., see N. Avico 57 (1989) 285
- Tscheslog, E., see H. Kowalski 57 (1989) 222
-
- Vagi, J., see U. Chandra 57 (1989) 263
- Valente, E., see P. Bacilieri 57 (1989) 459
- Valentini, S., see P. Bacilieri 57 (1989) 459
- Van Herwijnen, E., The use of text interchange standards for submitting physics articles to journals 57 (1989) 244
- Vande Vyvre, P., see D.M. Sendall 57 (1989) 343
- Vandoni, C.E., see R. Brun 57 (1989) 432
- Varela, J., see F. Barao 57 (1989) 358
- Varela, J., see C.M.L. Werner 57 (1989) 364
- Vascotto, A., see D.M. Sendall 57 (1989) 343
- Velasco, M., see P. Treleaven 57 (1989) 543

- Vermeulen, J.C., see ZEUS Collaboration 57 (1989) 316
- Vesztergombi, G., see NA-35 Collaboration 57 (1989) 290
- Voevodin, V.P., V.N. Govorun, A.M. Davidenko, An.V. Ekimov, N.S. Ivanova, V.I. Kovaltsov, Yu.M. Kozyaev, A.F. Lukyantsev, M.Yu. Matveev, V.A. Senko, A.N. Sytin and G.V. Tishin, The 780/E 32-bit specialized processor-emulator 57 (1989) 532
- Vogel, W., see ZEUS CDAQ Collaboration 57 (1989) 313
- Wallace, D.J., see S.P. Booth 57 (1989) 101
- Wan, T.C., see S. Youssef 57 (1989) 251
- Wan Abdullah, W.A.T., Connectionist architectures for triggering and track reconstruction 57 (1989) 472
- Watase, Y., High energy physics computing in Japan 57 (1989) 198
- Weaver, D., see D.M. Sendall 57 (1989) 343
- Werner, C.M.L., M. Pimenta, J. Varela and J. Souza, FADO 2.0: a high level tagging language 57 (1989) 364
- Whalley, M.R., The Durham-RAL high energy physics databases - HEPDATA 57 (1989) 536
- White, A., see P. Avery 57 (1989) 422
- White, B., The comparison and selection of programming languages for high energy physics applications 57 (1989) 538
- White, V., Distributed data-acquisition systems (PAN-DA) for Fermilab experiments 57 (1989) 348
- Whitmore, J., see ZEUS CDAQ Collaboration 57 (1989) 313
- Wiegandt, D., UNIX and HEP 57 (1989) 134
- Wiggers, L., see ZEUS CDAQ Collaboration 57 (1989) 313
- Wiggers, L.W., see ZEUS Collaboration 57 (1989) 316
- Wilderman, S., see S. Youssef 57 (1989) 251
- Willard, L., see A.M. Rushton 57 (1989) 427
- Williams, D.O., Computing on the eve of LEP data-taking: are we ready? 57 (1989) 8
- Yasu, Y., see Y. Karita 57 (1989) 455
- Youssef, S., W. Martin, T.C. Wan and S. Wilderman, A vectorized Monte Carlo detector simulation program for electromagnetic interactions 57 (1989) 251
- Yuasa, F., see Y. Karita 57 (1989) 455
- Zanarini, P., see R. Brun 57 (1989) 432
- Zeller, R.T., see D. Cutts 57 (1989) 339
- Zeller, R.T., see D. Cutts 57 (1989) 478
- Zeller, S., see A.M. Rushton 57 (1989) 427
- ZEUS CDAQ Collaboration, P. Erhard, J. Ficenec, K. Gather, G. Heath, M. Iacovacci, J. Kehres, R. Loveless, M. Mobayyen, D. Notz, R. Orr, A. Sephton, R. Stroili, K. Tokushuku, W. Vogel, J. Whitmore and L. Wiggers, ZEUS hardware control system 57 (1989) 313
- ZEUS CDAQ Collaboration, S. Bhadra, M. Crombie, D. Kirkby and R.S. Orr, The ZEUS third-level trigger system 57 (1989) 321
- ZEUS Collaboration, L.W. Wiggers and J.C. Vermeulen, The use of transputers in the ZEUS online system 57 (1989) 316

SUBJECT INDEX TO VOLUME 57

Computational methods

- Martin, W.R.
 Successful vectorization – reactor physics Monte Carlo code 57 (1989) 68
- McColl, W.F.
 Parallel algorithms and architectures 57 (1989) 84
- May, E.N.
 Portable parallel programming in a Fortran environment 57 (1989) 278
- Lessner, E.S.
 Weighted fit of parametric functions to distributions. The new interface of HBOOK with MINUIT 57 (1989) 385
- Billoir, P.
 Progressive track recognition with a Kalman-like fitting procedure 57 (1989) 390
- Ilyin, V.A., A.P. Kryukov, A.Ya. Rodionov and A.Yu. Taranov
 High speed Dirac algebra calculations in a space of arbitrary dimension by means of a computer algebra system 57 (1989) 505

Computer languages, hardware and software

- Mazza, C.
 Software project management 57 (1989) 23
- Gather, K.S.
 SASD-tools for program design 57 (1989) 29
- Metcalf, M.
 Recent progress in Fortran standardization 57 (1989) 78
- Otto, S.W.
 Shared-memory versus distributed-memory: halftime score 57 (1989) 95
- Booth, S.P., K.C. Bowler, D.J. Candlin, R.D. Kenway, B.J. Pendleton, A.M. Thornton, D.J. Wallace, J. Blair-Fish and D. Roweth
 Large scale applications of transputers in HEP: the Edinburgh Concurrent Supercomputer Project 57 (1989) 101
- Sufrin, B.
 Formal methods in system design and implementation 57 (1989) 108
- Levine, R.H.
 You want me to predict the future? 57 (1989) 118
- Kunz, P.F.
 Software management issues 57 (1989) 191
- Hoare, C.A.R.
 Formal methods in computer system design 57 (1989) 206

- Hall, D.E., W.H. Greiman, W.F. Johnston, A.X. Merola, S.C. Loken and D.W. Robertson
The software bus: a vision for scientific software development 57 (1989) 211
- Story, C.M.
Software engineering in industry 57 (1989) 217
- Chandra, U., G. Riccardi, J. Vagi, J.-L. Dekeyser and F. Hannedouche
Afttran: array Fortran programming language 57 (1989) 263
- Avico, N., P. Bacilieri, S. Cabasino, N. Cabibbo, L.A. Fernández, G. Fiorentini, A. Lai, M.P. Lombardo, E. Marinari, F. Marzano, P. Paolucci, G. Parisi, J. Pech, F. Rapuano, E. Remiddi, R. Sarno, G. Salina, A. Tarancón, G.M. Todesco, M.Torelli, R. Tripiccion and W. Tross
From APE to APE-100: from 1 to 100 Gflops in lattice gauge theory simulations 57 (1989) 285
- Berny, L. and H. Frese
Automatic generation of software detailed design documents for C language programs 57 (1989) 476
- Flieller, S.
T.Node, industrial version of SuperNode 57 (1989) 492
- White, B.
The comparison and selection of programming languages for high energy physics applications 57 (1989) 538
- Treleaven, P. and M. Vellasco
Neural computing overview 57 (1989) 543
- Data bases, data compilation and information retrieval**
- Putzer, A.
Data structures and data-base systems used in high energy physics: modelling and implementation 57 (1989) 156
- Read, B.J.
Data structures and organisation: special problems in scientific applications 57 (1989) 164
- Skotniczny, Z.
Query by Forms: user-oriented relational database retrieving system and its application in analysis of experiment data 57 (1989) 225
- Rushton, A.M., L. Hunt, T. McGlynn, F. Ochsenbein, B. Perrine, A. Richmond, F. Romelfanger, G. Russo, P.M.B. Shames, J. Travisano, L. Willard and S. Zeller
Design and implementation of an optical disk-based astronomical data archive 57 (1989) 427
- Whalley, M.R.
The Durham-RAL high energy physics databases - HEPDATA 57 (1989) 536
- Elementary particle physics**
- General, high energy physics and computing**
- Bock, R.K.
Bringing together high energy physicist and computer scientist. A summary of the Oxford conference on Computing in High Energy Physics 57 (1989) 1

- Williams, D.O.
Computing on the eve of LEP data-taking: are we ready? 57 (1989) 8
- Hertzberger, L.O.
Does HEP still hold challenges for computer science? 57 (1989) 15
- Mackenzie, P.B.
Machines for lattice gauge theory 57 (1989) 37
- Nash, T.
Event parallelism: distributed memory parallel computing for high energy physics experiments 57 (1989) 47
- Gamble, J.N.
Beyond Ethernet – future LAN's 57 (1989) 129
- Wiegandt, D.
UNIX and HEP 57 (1989) 134
- Myers, D.R.
HEP graphics: standard and portability versus performance and cost 57 (1989) 176
- Fluckiger, F.
Overview of HEP wide area networking: producer perspective 57 (1989) 183
- Hutton, J.
Future scientific networking 57 (1989) 188
- Watase, Y.
High energy physics computing in Japan 57 (1989) 198
- Kowalski, H., T. Poser, L. Stanco and E. Tscheslog
Investigation of ADAMO performance in the ZEUS calorimeter reconstruction program 57 (1989) 222
- Lebrun, P. and A. Kreymer
High level language memory management on parallel architectures 57 (1989) 231
- Brun, M., R. Brun and A.A. Rademakers
CMZ – a source code management system 57 (1989) 235
- Mueller, K. and P. Pfeifer
CODEBASE: a commercially developed code management system and code transfer facility 57 (1989) 239
- Van Herwijnen, E.
The use of text interchange standards for submitting physics articles to journals 57 (1989) 244
- NA-35 Collaboration, G. Vesztegombi
"Iconic" tracking algorithms for high energy physics using the TRAX-I massively parallel processor 57 (1989) 290
- Denby, B. and S.L. Linn
Status of HEP neural net research in the USA 57 (1989) 297
- Bizeau, C., A. Bogaerts, R.W. Dobinson, D.R.N. Jeffery, W. Lu, C. Parkman and Y. Perrin
The use and possible abuse of transputer links 57 (1989) 301

- Nichols, J.
The Fermilab central computing facility architectural model 57 (1989) 417
- Avery, P. and A. White
UFMULTI: a new parallel processing software system for HEP 57 (1989) 422
- Schilling, P.K.
Graphics at DESY 57 (1989) 443
- Runge, K.
A high speed network for HEP in Germany 57 (1989) 452
- Karita, Y., F. Abe, H. Hirose, H. Goto, R. Ogasawara, F. Yuasa, Y. Banno and Y. Yasu
Networking for high energy physics in Japan 57 (1989) 455
- Bacilieri, P., B. Caccia, R. Cardarelli, G.P. Carlucci, O. Ciaffoni, M. Coli, G. Di Pirro, M.L. Ferrer, A. Ghiselli, A. Martini, G. Medici, G. Mirabelli, E. Pace, R. Santonico, L. Trasatti, E. Valente and S. Valentini
STARNET, a fiber optic metropolitan area network with centralized control 57 (1989) 459
- Adye, T., T. Berners-Lee, S. Brobeck, A. Camacho, D. Davids, F. Harris and P. Lorenz
Online communications in the DELPHI experiment 57 (1989) 466
- Da Rocha, A.R.C. and S. Palermo
Software quality assurance in HEP 57 (1989) 524
- Schaile, O.
DZDISP: a graphics tool to interact with ZEBRA data structures 57 (1989) 528
- Voevodin, V.P., V.N. Govorun, A.M. Davidenko, An.V. Ekimov, N.S. Ivanova, V.I. Kovaltsov, Yu.M. Kozyaev, A.F. Lukyantsev, M.Yu. Matveev, V.A. Senko, A.N. Sytin and G.V. Tishin
The 780/E 32-bit specialized processor-emulator 57 (1989) 532
- Elementary particle physics**
Cascade and shower simulation
- Chen, H.-S.
Fast simulation of showers in inhomogeneous media 57 (1989) 375
- Elementary particle physics**
Quantum chromodynamics
- Mackenzie, P.B.
Machines for lattice gauge theory 57 (1989) 37
- Kennedy, A.D.
Status of lattice gauge theory calculations 57 (1989) 57
- Avico, N., P. Bacilieri, S. Cabasino, N. Cabibbo, L.A. Fernández, G. Fiorentini, A. Lai, M.P. Lombardo, E. Marinari, F. Marzano, P. Paolucci, G. Parisi, J. Pech, F. Rapuano, E. Remiddi, R. Sarno, G. Salina, A. Tarancón, G.M. Todesco, M.Torelli, R. Tripiccion and W. Tross
From APE to APE-100: from 1 to 100 Gflops in lattice gauge theory simulations 57 (1989) 285

Elementary particle physics**Detector design and simulation**

- Youssef, S., W. Martin, T.C. Wan and S. Wilderman
A vectorized Monte Carlo detector simulation program for electromagnetic interactions 57 (1989) 251
- Georgiopoulos, C.H. and M.E. Mermikides
Vectorized simulation of the response of a time projection chamber 57 (1989) 255
- Corden, M.J., C.H. Georgiopoulos and M.E. Mermikides
Implementation of the ALEPH detector simulation code using UNIX with on-line graphics display 57 (1989) 260
- Corden, M.J., C.H. Georgiopoulos, R. Brun, F. Bruyant and J.-L. Dekeyser
Progress towards a vectorized version of the GEANT Monte Carlo program 57 (1989) 268
- Dobberstein, M.P.
The calibration of the ZEUS forward drift chamber: an application for software with a high degree of parallelism 57 (1989) 483
- Jejcic, A., J. Maillard, J. Silva, M. Auguin and F. Boeri
Could running experience on SPMD computers contribute to the architectural choices for future dedicated computers for high energy physics simulation? 57 (1989) 507
- Männer, R.
A programmable systolic array correlator as a trigger processor for electron pairs in RICH (ring image Cherenkov) counters 57 (1989) 516
- Hallam-Baker, P.M. and I.C. McArthur
Use of Occam in ZEUS 57 (1989) 520

Elementary particle physics**Detector control and data acquisition**

- Krischer, W.
Commercial highly parallel signal processors on-line? 57 (1989) 121
- Briggs, D., T. Glanzman, P. Grosse-Wiesmann, J. Tinsman, S. Holmgren and M.W. Schaad
A calorimeter software trigger for the Mark II detector at SLC 57 (1989) 273
- Thaler, J.J.
Data-acquisition modeling and simulation 57 (1989) 309
- ZEUS CDAQ Collaboration, P. Erhard, J. Ficenec, K. Gather, G. Heath, M. Iacovacci, J. Kehres, R. Loveless, M. Mobayyen, D. Notz, R. Orr, A. Sephton, R. Stroili, K. Tokushuku, W. Vogel, J. Whitmore and L. Wiggers
ZEUS hardware control system 57 (1989) 313
- ZEUS Collaboration, L.W. Wiggers and J.C. Vermeulen
The use of transputers in the ZEUS online system 57 (1989) 316
- ZEUS CDAQ Collaboration, S. Bhadra, M. Crombie, D. Kirkby and R.S. Orr
The ZEUS third-level trigger system 57 (1989) 321

- Quarrie, D.R., M.D. Anderson, C.T. Day, G. Goeransson, J. Patrick, M. Schmitz, E. Sexton and B. Troemel
The CDF online system 57 (1989) 325
- Booth, A.W., J.T. Carroll, R. Forster, G. Goeransson, L. Gustafsson and N. Ho
A knowledge-based approach to network and module diagnosis 57 (1989) 332
- Cutts, D., J.S. Hoftun, C.R. Johnson and R.T. Zeller
Data acquisition at D0 57 (1989) 339
- Sendall, D.M., C. Boissat, W. Bozzoli, P. Burkimsher, R. Jones, J-P. Matheys, G. Mornacchi, T. Nguyen, P. Vande Vyvre, A. Vascotto and D. Weaver
MODEL: a software suite for data acquisition 57 (1989) 343
- White, V.
Distributed data-acquisition systems (PAN-DA) for Fermilab experiments 57 (1989) 348
- Saulys, A.C., A. Etkin, K.J. Foley, R.W. Hackenburg, R.S. Longacre, W.A. Love, T.W. Morris, E.D. Platner, S.J. Lindenbaum, C.S. Chan and M.A. Kramer
MPS data-acquisition software system 57 (1989) 353
- Barao, F., C. Gaspar, Ph. Gavillet, J.Ph. Laugier, B. Martin, P. Moreau, M. Pimenta, M. Reis and J. Varela
DELPHI's central partition 57 (1989) 358
- Werner, C.M.L., M. Pimenta, J. Varela and J. Souza
FADO 2.0: a high level tagging language 57 (1989) 364
- Cittolin, S., M. Demoulin, A. Fucci, W. Haynes, B. Martin, J.P. Porte and P. Sphicas
The third level trigger and output event unit of the UA1 data-acquisition system 57 (1989) 370
- Wan Abdullah, W.A.T.
Connectionist architectures for triggering and track reconstruction 57 (1989) 472
- Cutts, D., J.S. Hoftun, A. Sornborger, C.R. Johnson and R.T. Zeller
Neural networks for event filtering at D0 57 (1989) 478
- Hall, D.E., A. Agogino, W.H. Greiman, W.F. Johnston, D. Olson, R. Paasch, A. Padgaonkar and D.W. Robertson
A fault location system for a time of flight detector array 57 (1989) 499
- Boissat, C., R. Jones and G. Mornacchi
The model human interface 57 (1989) 512
- Elementary particle physics**
Event reconstruction and data analysis
- Nash, T.
Event parallelism: distributed memory parallel computing for high energy physics experiments 57 (1989) 47
- Mount, R.P.
Overview of the essential tools 57 (1989) 140
- Blobel, V.
From DST to publication 57 (1989) 148

- Putzer, A.
Data structures and data-base systems used in high energy physics: modelling and implementation 57 (1989) 156
- Fisher, S.M. and P. Palazzi
Using a data model from software design to data analysis: what have we learned 57 (1989) 169
- Stanco, L.
Particle track reconstruction in heavy materials with the Kalman technique 57 (1989) 380
- Lessner, E.S.
Weighted fit of parametric functions to distributions. The new interface of HBOOK with MINUIT 57 (1989) 385
- Billoir, P.
Progressive track recognition with a Kalman-like fitting procedure 57 (1989) 390
- Dittus, F.
Parallel processing with attached processors in a computer center environment 57 (1989) 395
- Delfino, M., E. Fernández, S. Orteu and A. Pacheco
The ALEPH event reconstruction facility: parallel processing using workstations 57 (1989) 401
- Sliwa, K.
CDF's experience with a parallel architecture multiprocessor system – ACP 57 (1989) 407
- O'Neale, S.W.
The OPAL event server 57 (1989) 413
- Brun, R., O. Couet, C.E. Vandoni and P. Zancarini
PAW, a general-purpose portable software tool for data analysis and presentation 57 (1989) 432
- Johnstad, H.
PAW at Fermilab 57 (1989) 438
- Bonissent, A. and F. Etienne
Artificial intelligence steering for the interactive analysis of a high energy physics experiment 57 (1989) 447
- Booth, S.P., R.W. Dobinson, D.R.N. Jeffery, W. Lu, K.M. Storr and A. Thornton
An evaluation of the Meiko computing surface for HEP Fortran farming 57 (1989) 486
- Carter, J.M., M.G. Green and T. Medcalf
Transparent use of transputers for off-line computation 57 (1989) 495
- Hoek, J.
Use of attached transputer hardware to VAX's for offline analysis 57 (1989) 503

Graphics

- Myers, D.R.
HEP graphics: standard and portability versus performance and cost 57 (1989) 176
- Corden, M.J., C.H. Georopoulos and M.E. Mermikides
Implementation of the ALEPH detector simulation code using UNIX with on-line graphics display 57 (1989) 260

- Brun, R., O. Couet, C.E. Vandoni and P. Zanarini
PAW, a general-purpose portable software tool for data analysis and presentation 57 (1989) 432
- Johnstad, H.
PAW at Fermilab 57 (1989) 438
- Schilling, P.K.
Graphics at DESY 57 (1989) 443
- Schaile, O.
DZDISP: a graphics tool to interact with ZEBRA data structures 57 (1989) 528

